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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,044	12/13/2000	Frederic Bordeaux	195910US0PCT	4048

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ALEXANDRIA, VA 22314

EXAMINER

ROSSI, JESSICA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 06/09/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/622,044

Applicant(s)

BORDEAUX ET AL.

Examiner

Jessica L. Rossi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-22 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 and 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. This action is in response to the amendment dated 4/24/03. Claims 12-22 and 26-29 are pending.
2. The rejection of claims 12-19 and 26-29 under 35 U.S.C. 103(a) as being unpatentable over Fukawa et al. (of record) in view of Cairns (of record) as set forth in the previous office action has been withdrawn in light of Applicants arguments.
3. The rejection of claims 12-19 and 28-29 under 35 U.S.C. 103(a) as being unpatentable over Rieser et al. (of record) in view of Cairns, or alternatively, Cairns in view of Reiser et al. as set forth in the previous office action has been withdrawn in light of Applicants arguments.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 12-19 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramling et al. (US 5397647) in view of Rieser et al. (US 3558415; of record), or alternatively, Rieser et al. in view of Kramling et al.

With respect to claims 12 and 28-29, Kramling is directed to making an anti-laceration automobile side window glazing (column 1, lines 8-9; column 5, lines 20-21) by adhering two glass sheets using an adhesive interlayer (column 3, lines 39-41). The reference teaches each of the glass sheets having a thickness of 1.5-4 mm (column 3, lines 21-23) and tempering each of the glass sheets to have a core compressive stress in the central zone ranging from 1-50 MPa

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(abstract; column 1, lines 10-13; column 3, lines 23-33). However, the reference is silent as to the thickness of the adhesive layer being more than 0.76 mm.

It is known in the art to make an anti-laceration automobile window glazing (column 1, lines 25-30) by adhering glass sheets having a thickness that falls within the range disclosed by Kramling (column 6, lines 47-53; column 5, lines 54-56) using an adhesive interlayer having a thickness of 0.03-0.06 in (0.76-1.52 mm) (column 5, lines 59-63), as taught by Rieser. It is noted that Rieser, like Kramling, teaches tempering the glass sheets prior to bonding (column 2, lines 49-50; column 3, lines 3-8; column 6, lines 10-15 and 26-30).

Rieser teaches using an interlayer having a thickness within a range consistent with that of the claimed invention, because a glazing comprising an interlayer having such a thickness has a better yield upon impact than prior art interlayers having a thickness outside this range (column 5, lines 54-58) and prior art interlayers having a thickness of 0.03 in (0.76 mm) tend to increase the possibility of "neck ruffle" (column 5, lines 69-73).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the anti-laceration side window glazing of Kramling using an adhesive having a thickness greater than 0.76 mm as taught by Rieser because this would result in the anti-lacerative benefits mentioned in the preceding paragraph.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to temper the glass sheets of Rieser to have a core compressive stress in the central zone ranging from 1-50 MPa and use the anti-laceration glazing as an automobile side window, as taught by Kramling, because this allows the glass sheets to be relatively thin while allowing them to break into large splinters that remain glued to the adhesive upon impact,

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thereby ensuring the safety of the passengers (Kramling; column 1, lines 15-17; column 8, line 68 – column 9, line 6).

Regarding claims 13-14, Kramling teaches the glazing having anti-laceration properties in the non-intact state and the non-intact bent state (column 4, lines 9-10; column 9, lines 1-6).

Regarding claim 15, Rieser teaches the interlayer having a thickness not more than 2 mm.

Regarding claim 16, Rieser teaches the interlayer having a thickness of not more than 1.9 mm.

Regarding claim 17, Rieser teaches the interlayer having a thickness of not more than 1.53 mm.

Regarding claim 18, Kramling (column 3, line 42) and Rieser (column 1, lines 35-41; column 6, lines 29-30) teach the adhesive can be PVB.

Regarding claim 19, Kramling is silent as to the adhesive being thermoplastic polyurethane. Selection of a particular adhesive would have been within purview of the skilled artisan depending on the desired characteristics of the adhesive. However, it would have been obvious to use thermoplastic polyurethane as an alternative to PVB because such is known in the art, as taught by Rieser (column 1, lines 35-41).

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramling et al. and Rieser et al., or alternatively, Rieser et al. and Kramling et al. as applied to claim 18 above, and further in view of the Admitted Prior Art.

Regarding claims 20-22, selection of a particular interlayer would have been within purview of the skilled artisan at the time the invention was made depending on the desired characteristics. However, it would have been obvious to one of ordinary skill in the art at the

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time the invention was made to use other interlayers such as polyethylene in the form of an ionomer resin, where the ionomer resin is a (meth)acrylic acid and ethylene copolymer, or a thermoplastic polyester such as poly(ethylene terephthalate) because such is known in the art, as taught by the Admitted Prior Art (p. 2, 4<sup>th</sup> paragraph).

7. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kramling et al. and Rieser et al., or alternatively, Rieser et al. and Kramling et al. as applied to claim 12 above, and further in view of Fukawa et al. (US 4910074; of record).

Regarding claim 26, Kramling and Rieser are silent as to the glazing comprising at least one functional layer. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the glazing of Kramling or Rieser comprise at least one functional layer because such is known in the art, as taught by Fukawa (Figure 13; column 2, lines 25-26; column 5, lines 50-56), and this enhances the aesthetics of the glazing (column 5, lines 50-55).

Regarding claim 27, Kramling and Rieser are silent as to the glazing having a plastic sheet on one of its outer faces. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a plastic sheet on one of the outer faces of the glazing of Kramling or Rieser because such is known in the art, as taught by Fukawa (Figures 5 and 11-14; column 2, lines 23-24), and this allows the properties of the glazing to be manipulated.

#### ***Response to Arguments***

8. Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **703-305-5419**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jessica L. Rossi  
Patent Examiner  
Art Unit 1733



jl  
June 5, 2003



**SAM CHUAN YAO**  
**PRIMARY EXAMINER**